

249 H. ABSTRACT OF THE DISCLOSURE

250 Emulsified liquid shortening compositions comprising dietary fiber gel, water and lipid, as
251 well as a method for making the compositions, are disclosed. According to the present invention,
252 dietary fiber gel can be subjected to micro-particulation by high shear via homogenization and
253 combined with water and lipid. These ingredients are mixed to form a mixture. The mixture can
254 then be subjected to colloid milling or other equivalent methods of emulsification, for example
255 homogenization and ultrasonification treatment, in the presence of food grade emulsifiers, for
256 example lecithin, and the emulsified mixture can be pasteurized. Functional foods such as high
257 omega three and omega six oils and pure omega three and omega six fatty acids, medium chain
258 triglyceride, beta carotene, calcium estearate, vitamin E, bioflavonoids, fagopyritrol, polyphenolic
259 antioxidants of vegetable origin, lycopene, luteine and soluble fiber, for example Beta-Glucan
260 derived from yeast, and other soluble fibers derived from grain, flax seed, and other vegetable and
261 fruit fiber sources can be added prior to mixing for additional health benefits. The compositions are
262 suitable for use in formulated foods to replace all or a portion of fats, oils and liquid shortenings
263 normally contained in the foods to yield lower calorie, lower fat formulations of the foods. The
264 emulsified compositions can also be used on a prorated basis as a vector for the introduction of
265 dietary fiber gels into formulated foods to partially and totally replace other hydrocolloids normally
266 found in formulated foods, thus providing an effective means to reduce production costs of
267 formulated foods.